Complete Summary

GUIDELINE TITLE

Heel spur syndrome.

BIBLIOGRAPHIC SOURCE(S)

Academy of Ambulatory Foot and Ankle Surgery. Heel spur syndrome. Philadelphia (PA): Academy of Ambulatory Foot and Ankle Surgery; 2003. 6 p. [14 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Heel spur syndrome

GUIDELINE CATEGORY

Diagnosis
Treatment

CLINICAL SPECIALTY

Podiatry

INTENDED USERS

Podiatrists

GUIDELINE OBJECTIVE(S)

To provide recommendations for the diagnosis and treatment of heel spur syndrome

TARGET POPULATION

Patients with heel spur syndrome

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

1. History, including an evaluation of the chief complaint (nature, location, duration, onset, course, anything that improves or exacerbates symptoms, any previous treatment)and past medical history (allergies/medications, medical history, surgical history, family history, social history)
2. Physical examination, including peripheral vascular, neurological, and orthopedic [palpation (direct/lateral pressure), biomechanical/gait analysis, range of motion]
3. Diagnostic procedures, including radiographic examination, laboratory tests, additional tests (nerve conduction studies, electromyography, noninvasive vascular testing)

Treatment

1. Nonsurgical treatment, including padding and strapping (taping), orthotics, heel cup, shoe modifications, oral anti-inflammatory medications (NSAIDs), anti-inflammatory injectables (i.e., corticosteroids), injection of local anesthetics (i.e., peripheral nerve block), analgesics, physical therapy, extracorporeal shockwave therapy
2. Surgical treatment, including resection of inferior or calcaneal exostosis with plantar fasciotomy, plantar fasciotomy as an isolated procedure, calcaneal decompression, tendon lengthening/tenotomy/capsulotomy, autologous fat transfer
3. Postoperative management, including radiographs, follow-up visits, weight bearing/immobilization, and orthotics

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The guideline development process began with a thorough MEDLINE search as well as a "call for papers" from the membership of the Academy of Ambulatory Foot and Ankle Surgery at large.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Drafts of the guidelines were reviewed in detail by each member of the Board of Trustees.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

I. Diagnosis
   A. History may include any of the following:
      1. An evaluation of the chief complaint (including nature, location, duration, onset, course, anything that improves or exacerbates, and any previous treatment).
      2. The past medical history (including allergies/medications, medical history, surgical history, family history, and social history).
   B. Physical examination may include:
      1. Peripheral vascular
      2. Neurological
      3. Orthopedic
         a. Palpation (direct/lateral pressure)
         b. Biomechanical/gait analysis
         c. Range of motion

II. Diagnostic Procedures
   A. Radiographic examination: X-rays should be taken. They are necessary to confirm/rule out bony pathology. X-rays may be weight bearing, partial weight bearing, or non weight bearing.
   B. Laboratory tests: Used to rule out inflammatory disease, infection, degenerative joint disease, systemic illness, etc.
   C. Additional tests (nerve conduction studies, electromyography [EMG], noninvasive vascular testing): These studies may be utilized in isolated situations when deemed necessary.
   D. Differential diagnosis may include:
      1. Plantar fasciitis without spur formation
      2. Bursitis (inferior or retrocalcaneal)
      3. Tendonitis
      4. Osteochondritis
      5. Periostitis
      6. Arthritis
      7. Fracture
      8. Neoplasms (malignant/benign)
      9. Neuritis
      10. Tarsal tunnel syndrome
      11. Neuroma
      12. Peripheral neuropathy
      13. Herniation of the plantar fat pad
      14. Haglund's deformity
      15. Infection (i.e., osteomyelitis, soft tissue)
      16. Gout
      17. Reflex sympathetic dystrophy
      18. Vascular insufficiency
      19. Systemic illness
      20. Medication induced (i.e., patients on thiazide diuretics)

III. Nonsurgical Treatment
   A. Goals of treatment:

Conservative (nonsurgical) treatment is primarily geared to relieving symptomatology. In most cases, conservative care should be considered prior to surgery.

B. Types of treatment:
   1. Padding and strapping (taping)
   2. Orthotics
   3. Heel cup
   4. Shoe modifications
   5. Oral anti-inflammatory medications (NSAIDs)
   6. Anti-inflammatory injectables (i.e., corticosteroids)
   7. Injection of local anesthetics (i.e., peripheral nerve block)
   8. Analgesics
   9. Physical therapy
   10. Extracorporeal shockwave therapy

IV. Surgical Treatment

A. Goals of treatment:

The goal of surgical treatment is not only to relieve the symptom(s), but to correct the underlying deformities and to improve function as well.

B. The primary reasons for surgical treatment are:
   1. Failure of nonsurgical treatment
   2. Impracticality of nonsurgical treatment
   3. The patient desires correction of a presenting deformity that is painful and/or causes a degree of loss of function
   4. The patient is informed of the procedure(s) to be performed, the treatment alternatives, and the reasonable risks involved, and elects to have surgical intervention

C. Site of surgery:

The surgical treatment of heel spur syndrome may be performed in the doctor's office. The hospital or an ambulatory surgical center may also be appropriate.

D. Anesthesia:

Local anesthesia is sufficient, unless there are extenuating circumstances. Intravenous (I.V.) sedation may be utilized with this.

E. Hemostasis:

Absence of bleeding is not required via tourniquet, but may be utilized at the discretion of the surgeon.

F. Surgical preparation:

Aseptic preparation ("usual" aseptic scrub, prep, draping and sterile technique)

G. Preoperative lab:

Necessity based upon patient's past medical history and current medical status

H. Prophylactic antibiotics:

At the discretion of the surgeon (or based upon requirement: i.e., mitral valve prolapse)

I. Pathological analysis of surgically removed tissue is recommended.
J. Bilateral or multiple surgeries may be performed either at the same session or in different surgical sessions.
K. Second opinion:

At the option of the patient or doctor

V. Surgical Procedures for the Treatment of Heel Spur Syndrome

These may include one or more of the following:

A. Resection of inferior or calcaneal exostosis with plantar fasciotomy
B. Plantar fasciotomy as an isolated procedure (i.e., endoscopic, minimally invasive surgery [MIS], or traditional approaches)
C. Calcaneal decompression
D. Tendon lengthening/tenotomy/capsulotomy may be used for heel spur syndrome in the event that the purpose of these procedures is both for treatment of the heel spur syndrome and the "hammertoe syndrome" as well.
E. Autologous fat transfer

VI. Postoperative Management

A. Radiographs: Should be taken immediately following surgery if osseous surgery has been performed. Additional x-rays as needed.
B. Postoperative visits: In the absence of complications, the patient should initially be seen within the first week following the procedure(s). Subsequent visits are determined by the procedures performed and the postoperative course.
C. Weight bearing/immobilization: Based upon the procedures performed and upon the individual patient, full, partial, or non-weight bearing may be utilized. Generally, a surgical dressing is applied in the immediate postoperative period. This is modified with time and the postoperative course. A postoperative shoe is usually indicated. Casting may or may not be necessary. The return to normal shoe is based upon the procedure(s) performed and the postoperative course of the individual patient.
D. Orthotics: May be prescribed to improve biomechanics.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Treatment may relieve or reduce pain, reduce the deformity, improve function, and arrest the progression of the deformity.

POTENTIAL HARMS

Postoperative Complications

- Numbness
- Edema
- Pain
- Recurrence
- Hematoma
- Infection
- Painful and/or hypertrophic scar formation
- Adhesions
- Vascular complications
- Reflex sympathetic dystrophy
- Fracture
- Gangrene
- Tissue necrosis

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Academy of Ambulatory Foot and Ankle Surgery. Heel spur syndrome. Philadelphia (PA): Academy of Ambulatory Foot and Ankle Surgery; 2003. 6 p. [14 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2000 (revised 2003 Sep)

GUIDELINE DEVELOPER(S)

Academy of Ambulatory Foot and Ankle Surgery - Medical Specialty Society

SOURCE(S) OF FUNDING

Academy of Ambulatory Foot and Ankle Surgery (AAFAS)

GUIDELINE COMMITTEE

Preferred Practice Guidelines Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

The committee consisted of five (5) members who were board certified, had a minimum of ten (10) years of clinical practice experience, and a minimum of five (5) years of teaching experience.

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Academy of Ambulatory Foot and Ankle Surgery. Heel spur syndrome. Philadelphia (PA): Academy of Ambulatory Foot and Ankle Surgery; 2000. 12 p.

The guideline is reviewed and updated twice a year as needed (in May and October).

GUIDELINE AVAILABILITY

Electronic copies: Not available at this time.

Print copies: Available from the Academy of Ambulatory Foot and Ankle Surgery (AAFAS) (formerly the Academy of Ambulatory Foot Surgery), 1601 Walnut Street, Suite 1005, Philadelphia, PA 19102; Web site, www.academy-afs.org.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on October 12, 2000. The information was verified by the guideline developer as of December 8, 2000. This summary was updated by ECRI on December 19, 2003. The information was verified by the guideline developer on December 29, 2003.

COPYRIGHT STATEMENT

Date Modified: 1/24/2005